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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,722	03/13/2006	Hitoshi Tamai	Q92292	9866
23373	7590	10/18/2007		
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER CHEUNG, WILLIAM K	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 10/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/564,722

Applicant(s)

TAMAI, HITOSHI

Examiner

William K. Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. The request filed on July 30, 2007 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 10/564,722 is acceptable and a RCE has been established. An action on the RCE follows.
2. In view of the amendment and argument filed July 30, 2007, the rejection of claims 1-4, 7-20 under 35 U.S.C. 102(b) as being anticipated by Hasegawa et al. (GB 2303632 A) is withdrawn. As amended, the components of the curable composition as claimed are individual components of a physical mixture.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsuda et al. (US 6,359,030).

*The invention of claims 1-20 relates to a **curable composition** which comprises a mixture of the following components (A), (B) and (C):*

*Component (A): A **polyoxyalkylene polymer** containing at least one **reactive silyl group** at a molecular **chain terminus**;*

*Component (B): A **polymer** composed of **acrylic acid alkyl ester monomer units** and/or **methacrylic acid alkyl ester monomer units** containing, on the average, at least one **reactive silyl group** in each molecule;*

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*Component (C): An ionic surfactant.*

Tsuda et al. (abstract; col. 1, line 53 to col. 2, line 6) disclose resin compositions comprising a mixture of at least two polymeric components, and surfactants. Tsuda et al. (col. 2, line 37-65; col. 8, line 27-57) disclose that the surfactants suitable for the disclosed resin compositions are ionic, anionic and non-ionic surfactants. The surfactants can also be fluorinated (col. 2, line 46). Further, regarding the claimed nitrogen-containing compound (cationic surfactant), Tsuda et al. (col. 2, line 56-60) clearly teach the use of fluorine-containing emulsifying agent having carboxyl groups, its metal salt, ammonium salt, amine salt or quaternary ammonium salt. Regarding the claimed amount of surfactants in the claimed resin compositions, Tsuda et al. (col. 8, line 58-61) clearly disclose an amount ranges from 0.05 part by weight to about 5 parts by weight. Regarding claim 6 which recites "fluorine-containing alkylsulfonic acid salt, Tsuda et al. (col. 8, line 31-35) clearly teach the use of alkylsulfonic acid salts, and Tsuda et al. (col. 2, line 44-50) clearly teach the use of fluorinated surfactants. It would not be difficult to one of ordinary skill in art to recognize and appreciate that fluorinated alkylsulfonic acid would also be suitable for the resin composition as claimed.

Regarding the claimed "polyoxyalkylene polymer containing at least one reactive silyl group at a molecular chain terminus", Tsuda et al. (col. 5, line 53-60; col. 6, line 10) clearly teach a polyether resin comprising silyl groups. Because polyether resins

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generally have hydroxyl terminal groups, therefore, the examiner has a reasonable basis that the silylated polyethers should also at the terminals of the polymers.

Regarding the claimed "polymer composed of acrylic acid alkyl ester monomer units and/or methacrylic acid alkyl ester monomer units containing, on the average, at least one reactive silyl group in each molecule", Tsuda et al. (col. 7, line 3-8, 51-58) clearly disclose a list silylated-modified acrylic resin from the list of silylating agents .

In view of the substantially identical resin compositions disclosed in Tsuda et al. and the resin compositions such as the silylated polymers as claimed, the examiner has a reasonable basis that the claimed "curable" of claims 1-17 or the claimed "sealant" feature of claims 10, 18-20 are inherently possessed in Tsuda et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

Regarding the claimed "for buildings" of claims 10, 18-20, applicants must recognize that the recitations are merely citing the intended uses of the claimed resin compositions. Applicants must recognize that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior

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art. If the prior art structure is capable of performing the intended use, then it meets the claim.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William K. Cheung, Ph.D.

Primary Examiner

October 7, 2007

WILLIAM K. CHEUNG  
PRIMARY EXAMINER

WILLIAM K. CHEUNG  
PRIMARY EXAMINER